



(Use as many sheets as necessary)

Sheet 1 of 6

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Application Number	10/714,698
Filing Date	November 18, 2003
First Named Inventor	BENALI
Art Unit	3749
Examiner Name	Kathryn S. O Malley
Attorney Docket Number	1004p71US01

U. S. PATENT DOCUMENTS

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T ^o
		Country Code ³ Number ⁴ Kind Code ⁵ (if known)				
KS	BA	CA 2,097,011	12/27/1993			
	BB	CA 2,101,368	03/26/1994			
	BC	CA 2,178,575	12/08/1997			
	BD	CA 2,196,808	12/19/1996			
	BE	WO 96/40837	12/19/1996			

Examiner Signature	K. O. Malley	Date Considered	2/2/05
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NON PATENT LITERATURE DOCUMENTS

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KSO	CA	BENALI, M., (2003). Thermal drying of foods: loss of nutritive content and spoilage issues. In A.S. Mujumdar (Ed.), Drying of products of biological origin. Enfield: Oxford IBH and Science Publishers (In press).	
KSO	CB	BARRETT, N. & FANE, A. (1989). Drying liquid materials in a spouted bed. In A.S. Mujumdar & M. Roques (Ed.), Drying '89 (pp. 415-420). New York: Hemisphere Publishing Corporation.	
KSO	CC	OLIVEIRA, W.P. & FREIRE, J.T. (1996). Analysis of evaporation rate in the spouted bed zones during drying of liquid materials using a three region model, Proceedings of the 10th International Drying Symposium (IDS'96), Kraków-Poland (Vol. A.pp.504-212).	
KSO	CD	SPITZNER-NETO, P.I., CUNHA, F.O. & FREIRE, J.T. (1982). Effect of the presence of paste in a conical spouted bed dryer with continuous feeding, Drying Technology, 20,789-811. [Published by Marcel Dekker Inc. New York]	
KSO	CE	BENALI, M. & AMAZOUZ, M. (2002). Effect of drying aid agents on processing of sticky materials, Dev. Chem. Mineral Process, 10(3/4), 1-14. [Development in Chemical Engineering and Mineral Processing, The Australian Research Journal, Published by Curtin University of Technology, Australia]	

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Signature

KSO Malley

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KSO	CF	PHAM, Q.T. (1983). Behavior of a conical spouted-bed dryer for animal blood, Can. J. Chem. Eng. 61, 426-434. (CANADA)	
KSO	CG	MARKOWSKI, A.S. & KAMINISKI, W. (1983). Hydrodynamic characteristic of jet-spouted beds. Can J. Chem. Eng. 61, 377-383. (CANADA)	
KSO	CH	MARKOWSKI A.S. (1992). Drying characteristics in a jet-spouted bed dryer. Can J. Chem. Eng. 70, 938-944, Canada.	
	CI	KUTSAKOVA, V.E. & BOGATYREV, A.N. (1987). Intensification of heat and mass transfer in drying of food products, (in Russian). [Russia]	
KSO	CJ	KUTSAKOVA, V.E., UTKIN Y.V. & KUPANOV, B.Y. (1990). Method for Drying of Liquid Materials, Russian Patent No. 1560948.[ENGLISH TRANSLATION OF ABSTARCT]	
KSO	CK	OCHOA-MARTINEZ, L.A., BRENNAN, J.G. & NIRANJAN, K. (1993). Spouted bed dryer for liquid foods, Food Control, 4,41-45. [Published by Elsevier Science, Rotterdam, The Netherlands]	
	CL	OCHOA-MARTINEZ, L.A., BRENNAN, J.G. & NIRANJAN, K. (1993). Drying of liquids in a spouted bed dryer of inert particles: Heat transfer studies, Journal of Food Engineering, 20, 135-148. United Kingdom.	
KSO	CM	BENALI ET AL., Drying of Value Added Liquid Wastes, Symposium on Energy Engineering, pp. 917-922, 2000.. (New York)	

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KSO	CN	SPITZNER N ET AL., Analysis Of The Effect Of Paste On The Behaviour Of A Spouted Bed With Inerts, Drying '97 - Proceedings of the 11 International Drying Symposium (IDS '98) August 19-22, 1998, vol. C, pp. 1936-1943. [Published by Ziti Editions, Greece]	
KSO	CO	BENALI ET AL., Energy Efficient Drying Process For Transforming Food By-Products, [Not Published]	
KSO	CP	AMAZOUZ ET AL. Preservation Technologies For Food, Feed And Fibre, in New Opportunities For Drying, Infrared, Microwave And Freezing, Seminar November 22-23, 1999, Winnipeg, Manitoba, Canada.	
KSO	CQ	KUTSAKOVA ET AL., Dewatering Of Solutions In A Fluidized Bed Of Inert Particles, Theoretical Foundations Of Chemical Engineering 17(3) 256-260, 1983, 1984 Plenum Publishing Corporation. [New York]	
KSO	CR	KUTSAKOVA ET AL., Some Trends In The Kinetics Of Drying Solutions In A Fluidized Bed Of Inert Particles, 1985 Plenum Publishing Corporation. [Theoretical Foundations of Chemical Engineering, New York]	
KSO	CS	KUTSAKOVA ET AL., Kinetics Of Drying Of Protein Pastes, Suspensions, Emulsions, And Solutions In A Fluidized Bed Of Inert Substances,	

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First Named Inventor

BENALI

Art Unit

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Examiner Name

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	CS	Vol. 60, No. 5 1987, 1987 Plenum Publishing Corporation. [Theoretical Foundations of Chemical Engineering, New York]	
	CT	M. AMAZOUZ ET AL., Jet spouted bed dryer with inert particles, Final report prepared for Enbridge Consumers Gas, Centra Gas Manitoba and Rothsay Inc., February 2000.	
	CU	M. OLAZAR ET AL., Stable operation conditions for gas-solid contact regimes in conical spouted beds, Ind. Eng. Chem. Res., Vol. 31, pp. 1784-1792 (1992).	
	CV	O. UEMAKI ET AL., Particle velocity and solids circulation rate in a jet-spouted bed, Can. J. Chem. Eng., Vol. 70, pp. 925-929 (1992).	
	CW	L.A. OCHOA MARTINEZ ET AL., drying of liquids in a spouted bed of inert particles: Heat transfer studies, Journal of Food Engineering, Vol. 20, pp. 135-148 (1993).	
	CX	W.P. OLIVEIRA ET AL., Analysis of the drying of pastes in conical spouted beds, Drying'96, in Proceedings of the 9th International Drying Symposium, Australia, pp. B-496 - B-502 (1996).	
	CY	B.R. BHANDARI ET AL., Problems associated with spray of sugar-rich foods, Drying Technology, Vol. 15, 2, pp. 671-684 (1997).	
	CZ	B.R. BHANDARI ET AL., A semi-empirical approach to optimize the quantity of drying aids required to spray dry sugar-rich foods, Drying Technology, Vol. 15, 10, pp. 2509-2525 (1997).	

Examiner
Signature*KSO Malley*Date
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	DA	J. ULLAH ET AL., Drying soymilk in a spouted bed of inert particles, ADC'99, in Proceedings of the 1st Asian-Australian Drying Conference, Bali (Indonesia) October 24-27, 1999.	
	DB	J. ULLAH ET AL., Heat transfer studies in drying of liquids in a spouted bed of inert particles, ADC'99, in Proceedings of the 1st Asian-Australian Drying Conference, Bali (Indonesia) October 24-27, 1999.	
	DC	R. LEGROS ET AL., Spout-fluid bed dryer and granulator for treatment of waste slurries, US Patent 5,913,588, 1999.	
	DD	A.S. MARKOWSKI, Quality interaction in a Jet Spouted Bed for Bio-products, Drying Technology, 11 (2), 369-387 (1993).	
	DE	BIOPRO Centre and Groupe de Recherche en Gazotechnologies, Industrial sludge heat treatment potential evaluation, Internal report (in French), 1997.	
	DF	K. KMIEC, The minimum spouting velocity in conical beds, Can. J. Chem. Eng., v.61, pp. 274-280 (1983).	
	DG	H.T. BI ET AL., Minimum spouting velocity of conical spouted beds, Can. J. Chem. Eng., v.75, pp. 460-465 (1997).	

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